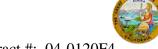
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-026526 Address: 333 Burma Road **Date Inspected:** 15-Oct-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1530 Prime Contractor: American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: See Below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A **Electrode to specification:** Yes No N/A Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes **Approved Drawings:** Yes No

N/A **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 **Component: OBG** and Tower

Summary of Items Observed:

At the start of the shift the Quality Assurance Inspector (QAI) traveled to the SAS project site and observed the work and the inspection performed by American Bridge/Fluor Enterprises (AB/F) personnel. The inspection was performed as noted below:

A). OBG W12/W13

OBG E12/E13

Lifting Lug Holes, QA Verification

QAI: Doug Frey

- 1). The QAI, Doug Frey, was assigned to this designated work station to observe the Complete Joint Penetration (CJP) welding, the QC inspection and other related work of the field splice identified as 12W-13W-E. The QC inspector William Sherwood performed an inspection of this weld and at the conclusion of the inspection no issues were noted. No welding was perfomed at this work station on this date
- 2). The QAI also observed the continued Complete Joint Penetration (CJP) groove welding of the field splice identified as 12E-13E-F. The welding was performed by Jorge Lopez ID- utilizing the Flux Cored Arc Welding w/gas (FCAW-G) as per the Welding Procedure Specification (WPS) ABF-WPS-D15-3040B-3, Rev. 0.
- 3). The QAI also performed the Ultrasonic Testing (UT) of the Lifting Lug Holes identified as 10W-PP88-W4-W1 and W2. No issues were noted and the testing performed by the QAI appeared to comply with the contract documents.

WELDING INSPECTION REPORT

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B). OBG E12/E13

QAI: William Clifford

- 1). The QAI, William Clifford, was assigned to this designated work station to observe the continued Complete Joint Penetration (CJP) welding and the QC inspection of the field splice identified as 12E-13E-C1. The welding was performed by Wai Kitlai ID-2953 utilizing the Flux Cored Arc Welding w/gas (FCAW-G) process as per the Welding Procedure Specification (WPS) ABF-WPS-D15-3042A-1, Rev. 0.
- 2). The QAI also observed the continued Complete Joint Penetration (CJP) groove welding of the field splice identified as 12E-13E-E. The welding was performed by Xiao Jian Wan ID-9677 and Jin Pei Wang ID-7299 utilizing the Flux Cored Arc Welding w/gas (FCAW-G) as per the Welding Procedure Specification (WPS) ABF-WPS-D15-3042A-1, Rev. 0.
- 3). The QAI also observed the continued Complete Joint Penetration (CJP) groove welding of the field splice identified as 12E-13E-F. The welding was performed by Jorge Lopez ID- utilizing the Flux Cored Arc Welding w/gas (FCAW-G) as per the Welding Procedure Specification (WPS) ABF-WPS-D15-3040B-3, Rev. 0.
- C). Lifting Lug Holes, QA Verification

Cross Beam Anchorage (Pier 7), QA Verification

QAI: Joselito Lizardo

- 1). The QAI performed a Visual Test (VT) and a Magnetic Particle Test (MPT) of the lifting Lug Holes identified as 10W-PP88-W4-W1, W4 and 11E-PP104-E3-W3, W4.
- 2). At approximately 1230 of this shift, Mr. Lizardo traveled to Pier 7 to observe the QC inspection and testing performed by Sal Merino on the #19 Crossbeam Jacking frame. At the conclusion of the QC inspection and testing, the QAI Joselito Lizardo, performed a verfication of the inspection and testing and no issues were noted.

The work schedule for QAI, Craig Hager, was revised and rescheduled to report on the night shift to perform inspection and testing of selected eye bars on the existing bridge.

QA Lead Inspector (QALI) Summary

Later in the shift, this QA Lead Inspector (QALI) also observed the QAI's, Joselito Lizardo, Doug Frey, Craig Hager and William Clifford monitor the work performed by the QC inspectors at random intervals and also observed the QA Inspectors verify the welding parameters, the minimum preheat and the maximum interpass temperatures. The QAI's utilized a Fluke 337 clamp meter to measure the electrical welding parameters, Tempil Heat Indicators and/or a Fluke 63 IR Thermometer for verifying the preheat and interpass temperatures. At the conclusion of the shift this QA Lead Inspector discussed and reviewed the work performed by the QAI's in regards to the various observations and the verifications of the WPS's, consumables, welding parameters, preheat and interpass temperatures as described above. The QAI observations of the QC inspection and verification of the welding parameters performed on this date appeared to comply with the contract specifications with no issues noted on this date. The welding performed at the various work areas were not completed during this shift.

This report was generated upon the discussions with the QA Inspectors, random visual observations and review of the QA field reports.

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Review of QA Tracking Plan

This QA Inspector continued the daily review of field inspection reports and update of the field document control tracking records regarding the Orthotropic Box Girders (OBG, Longitudinal and Transverse "A" Deck Stiffeners, Deck Access Holes and the Tower Shear plates. The QAI also updated the tracking records for the pipe welds and the pipe supports.

On this date the QAI commence the review of QA tracking documents for the OBG's identified as E3, E4 and E5.

Summary of Conversations:

There were general conversations with Quality Control Lead Inspector, Bonifacio Daquinag, Jr., at the start of the shift regarding the location of welding, inspection personnel scheduled for this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes, Danny	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer